PATENT ABSTRACTS OF JAPAN

(11)Publication number:

09-313435 a

(43) Date of publication of application: 09.12.1997

(51)Int.Cl.

A61B 1/04

G02B 23/24

H04N 7/18

(21)Application number : **09**-**042684**

(71)Applicant: OLYMPUS OPTICAL CO LTD

(22)Date of filing:

26.02.1997

(72)Inventor: TANAKA YASUTO

(30)Priority

Priority number: 08 68101

Priority date : 25.03.1996

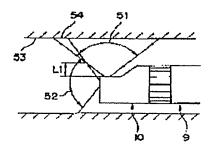
Priority country: JP

(54) ENDOSCOPE DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an endoscope device which can easily grasp the positioning relationship between images produced in different view field directions.

SOLUTION: A tip optical adapter 10 is connected removably with the tip 9 of an endoscope so that it is possible to perform simultaneous observations in side view and direct view, and image formation is made in a CCD so that an overlap part 54 is generated where the side view field extent 51 due to a side view photographing optical system is partially overlapped on the direct view field extent 52 due to a direct view photographing optical system, and a photograph signal photoelectrically transduced by the CCD is processed by a signal processing means and displayed on a monitor in its adjacent area. The overlapping parts of the two images are approx. similar and are displayed with the continuity maintained so that movements in the same direction are generated relative to the motion of the endoscope, etc., and it is possible to facilitate visually grasping the positioning relationship between the two images and ensure the operating easiness.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration] [Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]